

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): Synthetic bitumen emulsion, that can be used ~~in particular~~ in making colored coatings, consisting essentially of clear binders and ~~possibly~~ optionally colored pigments, characterized by the fact that it contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent.

Claim 2 (currently amended): Emulsion as set forth in claim 1, characterized by the fact that the compound of the latex family is ~~chosen from among the~~ selected from the group consisting of acrylic polymers, ~~and~~ natural rubber, ~~and~~ ~~or~~ synthetic rubbers; that can be used in the form of an aqueous dispersion, wherein the synthetic rubbers are selected from ~~chosen from among~~ the group consisting of:

EPDM (ethylene-propylene-diene-monomer),

EPM (ethylene-propylene monomer),

the S.B.R. (styrene-butadiene rubber) statistic or S.B.S. (styrene-butadiene-styrene) sequenced, linear or star-shaped, or S.I.S. (styrene-isoprene-styrene) styrene-butadiene copolymers,

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polyisobutylene,
polybutadiene,
polyisoprene, and
polychloroprene.

Claim 3 (original): Emulsion as set forth in claim 1, characterized by the fact that the latex family compound is introduced in a quantity that ranges between 5 and 30% by weight of the emulsion.

Claim 4 (original): Emulsion as set forth in claim 1, characterized by the fact that said clear synthetic binder contains at least one plasticizing agent with an oil fraction aromatic extract base and at least one structuring agent with an oil resin base.

Claim 5 (original): Emulsion as set forth in claim 1, characterized by the fact that said clear synthetic binder contains at least one plasticizing agent with an aliphatic hydrocarbonic compound base, whose number of carbon atoms is greater than or equal to 20, and at least one structuring agent with a cycloaliphatic hydrocarbonic polymer base.

Claim 6 (currently amended): Emulsion as set forth in claim 5, characterized by the fact that the plasticizing agent is ~~chosen from among~~ selected from the group consisting of:

natural ~~or synthetic~~ aliphatic oils,
synthetic aliphatic oils, and
polymers with a low degree of polymerization, ~~such as polyolefins,~~

Claim 7 (currently amended): Emulsion as set forth in claim 6, characterized by the fact that the aliphatic oils have an aniline point that is greater than or equal to 90°C (according to the ASTM D611 method) ~~and preferably greater than or equal to 110°C.~~

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Claim 8 (currently amended): Emulsion as set forth in claim 6, characterized by the fact that the aliphatic oils are ~~chosen from among the~~ hydrogenated white oils; that contain at least 60% of paraffinic carbon atoms (according to the ASTM D2140 method).

Claim 9 (currently amended): Emulsion as set forth in claim 6, characterized by the fact that the polymers that make up the plasticizing agent have a viscosity index (VI) (according to the ASTM D2270 method) that is greater than or equal to 100, ~~and preferably greater than or equal to 120.~~

Claim 10 (currently amended): Emulsion as set forth in claim 6, characterized by the fact that the polymers are ~~of the~~ polybutene ~~type~~, with a molecular mass number that ranges between 900 and 2,600 and a ~~cinematic~~ kinematic viscosity at 100°C (according to the ASTM D445 method) that ranges between 200 and 4,600 cSt (or mm²/s).

Claim 11 (currently amended): Emulsion as set forth in claim 5, characterized by the fact that that the structuring agent is a polycycloaliphatic thermoplastic resin ~~in particular of the polycyclopentane type~~, with a low molecular mass.

Claim 12 (currently amended): Emulsion as set forth in claim 11, characterized by the fact that the polycycloaliphatic thermoplastic resin is polycyclopentane type thermoplastic resin ~~and~~ has a softening point (ball-ring temperature) that is greater than 125°C, and a Gardner color index (according to the NFT 20-030 standard) of at the most 1.

Claim 13 (original): Emulsion as set forth in claim 4, characterized by the fact that the ratio by weight between the structuring agent and the plasticizing agent ranges between 0.4 and 1.5.

Claim 14 (original): Emulsion as set forth in claim 1, characterized by the fact that the plasticizing agent is introduced in a quantity that ranges between 40 and 70% by weight of the clear synthetic binder.

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Claim 15 (original): Emulsion as set forth in claim 1, characterized by the fact that clear synthetic binder has a penetrability that ranges between 20 and 300 tenths of a millimeter.

Claim 16 (currently amended): Emulsion as set forth in claim 1, characterized by the fact that the clear synthetic binder also contains either vinyl ethylene-acetate (EVA) or S.B.S. sequenced styrene-butadiene ~~type~~ copolymers, or low density polyethylene ~~type~~ polymers.

Claim 17 (currently amended): ~~Emulsion as set forth in claim 1~~ Synthetic bitumen emulsion, that can be used in making colored coatings, consisting essentially of clear binders and optionally colored pigments, characterized by the fact that it contains:

between 40 and 70% by mass of at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA) measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

between 5 and 30% by mass of at least one compound of the latex family,

between 60 and 30% by mass of water, and

between 3 and 10% by mass of ~~emulsifier~~; at least one emulsifying agent.

Claim 18 (currently amended): Procedure for preparing an emulsion as set forth in claim 1, characterized by the fact that it consists of the following steps:

a) preparation of a synthetic binder, using a mixture that is substantially homogenous in its melted state of at least one plasticizing agent and at least one structuring agent,

b) emulsification of the synthetic binder obtained in a) using an aqueous solution of an emulsifying agent, while maintaining the mixture obtained at a temperature that is sufficient for obtaining a stable emulsion, and

c) cooling of the emulsion and incorporation of the latex in the form of an emulsion, under agitation at room temperature;

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Claim 19 (original): Procedure as set forth in claim 18, characterized by the fact that step a) consists in mixing the components of the synthetic binder at a temperature that ranges between 180 and 200°C.

Claim 20 (original): Procedure as set forth in claim 18, characterized by the fact that the second step b), consists of the incorporation into the synthetic binder, under agitation, of an emulsifying solution made from a non-ionic or cationic emulsifier, introduced at a ratio that ranges between 3 and 8% by mass of the emulsifying solution.

Claim 21 (currently amended): Procedure as set forth in claim 18, characterized by the fact that in step c) the latex emulsion is either non-ionic or cationic, and the incorporation of the latex emulsion, ~~in particular non ionic or cationic~~, is carried out at a ratio that ranges between approximately 15 and 30% by mass, at room temperature.

Claim 22 (original): Procedure as set forth in claim 18, characterized by the fact that the synthetic binder is obtained by mixing a plasticizing agent that consists of an aliphatic hydrocarbonic compound, whose number of carbon atoms is greater than or equal to 20 and a structuring agent that consists of a cycloaliphatic hydrocarbonic polymer.

Claim 23 (currently amended): Application of an emulsion as set forth in claim 1, to the making of a colored surface treatment on a damp-proofing material, ~~such as a membrane or coat~~, that consists of at least one base coat, characterized by the fact that the synthetic bitumen deposit, to which are added colored pigments, is obtained by spreading this emulsion on the base coat and breaking down the emulsion by evaporation of its water.

Claim 24 (original): Application as set forth in claim 23, characterized by the fact that the surface treatment layer has a ball-ring temperature (TBA) that is greater than 160°C.

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Claim 25 (currently amended): Application of an emulsion as set forth in claim 1, to the making of a colored surface treatment for cold roadway applications, ~~such as sealing coats, cold poured coats, and slurries~~, on a support, characterized by the fact that the deposit of the synthetic binder, to which are added colored pigments and aggregates, is obtained by cold spreading and chemical break down of said emulsion.

Claim 26 (new): Emulsion as set forth in claim 6, wherein the polymers with a low degree of polymerization are polyolefins.

Claim 27 (new): Emulsion as set forth in claim 7, characterized by the fact that the aliphatic oils have an aniline point that is greater than or equal to 110°C (according to the ASTM D611 method).

Claim 28 (new): Emulsion as set forth in claim 9, characterized by the fact that the polymers that make up the plasticizing agent have a viscosity index (VI) (according to the ASTM D2270 method) that is greater than or equal to 120.

Claim 29 (new): Emulsion as set forth in claim 11, wherein the polycycloaliphatic thermoplastic resin is polycyclopentane.

Claim 30 (new): Application of an emulsion as set forth in claim 23, wherein the damp-proofing material is a membrane or coat.

Claim 31 (new): Application of an emulsion as set forth in claim 25, wherein the cold roadway applications are selected from the group consisting of sealing coats, cold poured coats, and slurries.